

Field Report

Antietam National Battlefield

■ 1.0 Summary

Antietam National Battlefield consists of approximately 3,266 acres of rolling farmland and woodland in southern Washington County, Maryland. Due to the fact that much of the surrounding area retains the same low-density, agricultural nature that existed at the time of the battle, the landscape has remained relatively unchanged since the fall of 1862.

Originally established as a national battlefield site by an Act of Congress on August 30, 1890, Antietam was administered by the War Department until August 10, 1933 when responsibility for the battlefield and the adjacent Antietam National Cemetery was transferred to the NPS. This site marks the end of General Robert E. Lee's first invasion of the North in September 1862. This is the site of the bloodiest single day's combat of the entire Civil War. Of the approximately 40,000 Confederate and 87,000 Union troops who participated in this battle, more than 23,100 were dead, wounded or missing at the end of the day.

It appears that alternative transportation systems (ATS) may have a significant potential to address the currently observed transportation and resource conservation issues facing the Antietam National Battlefield. These potentials appear to relate primarily to the provision of improved internal park circulation for visitors. Based on existing information and observations, it would appear that this park is a high-priority candidate for a more detailed transportation study to more precisely define the specific elements of such a program.

There appear to be several feasible ATS alternatives that could be potentially implemented at Antietam National Battlefield. These include the following:

- An internal circulation tram or bus service following the existing park tour route. This service might take the form of either a voluntary or mandatory visitor circulation system. The implementation of such a service could not only improve the visitor experience by providing the opportunity for on-board interpretation, but would alleviate, if not totally eliminate, the impacts on the park's resources now being imposed by auto and bus use. Such an internal circulation service would also facilitate visitation by elderly and disabled visitors. The vehicles used for any such service would have to be of an appropriate scale to minimize damage to the tour road and surrounding facilities such as fences and monuments. This service could also help to reduce parking demands at the designated stops along the tour road.
- A secondary internal distribution system suggested by park staff would be an ATS operation to connect the park tour route to the Roulette Farmhouse. Such a service

might begin at the Mumma Farmstead, where improved visitor information and interpretation facilities are to be provided. Park staff offered the view that this secondary distribution system might take the form of either a horse drawn wagon or a low-impact, environmentally sensitive tram or jitney-type vehicle.

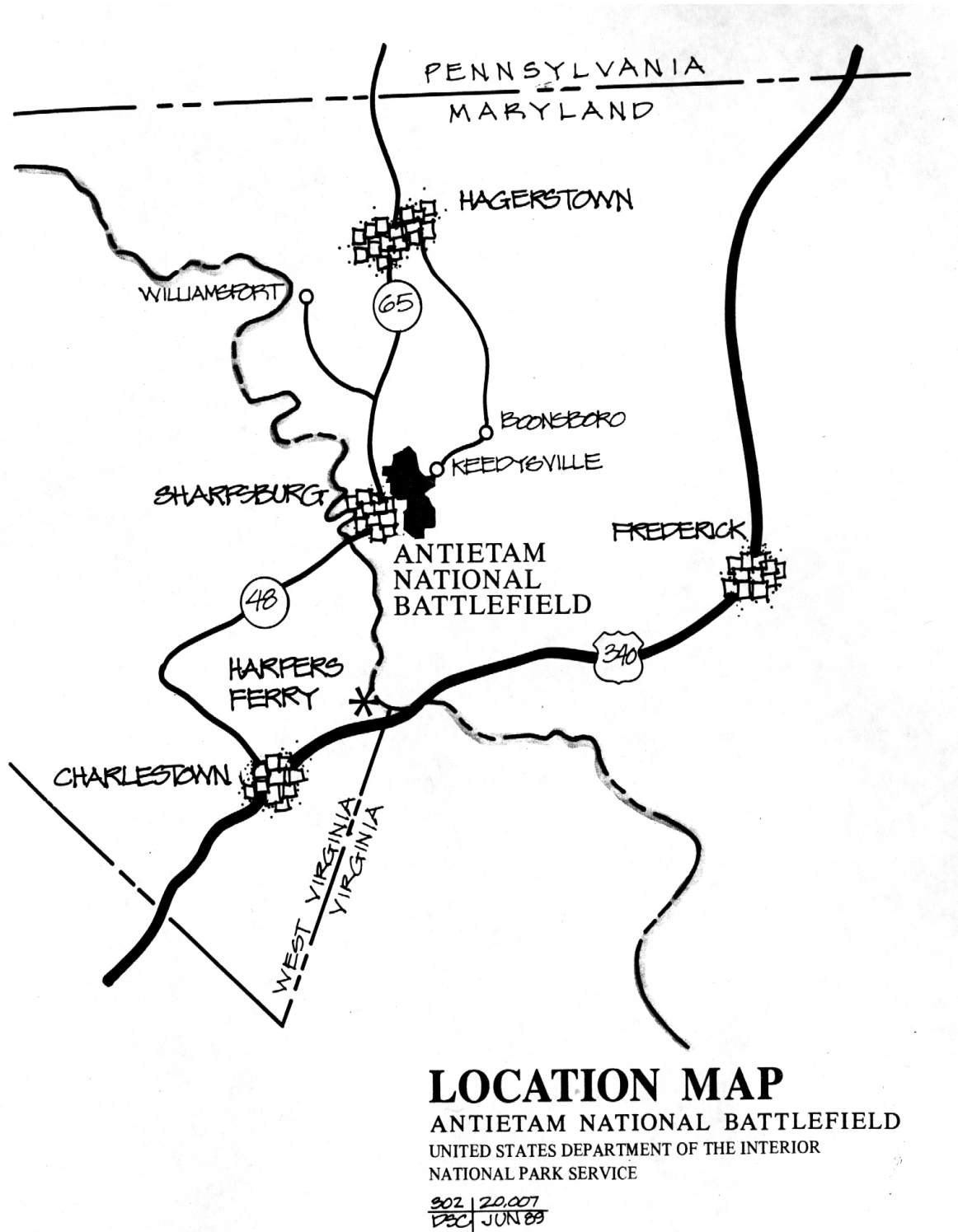
- In order to maximize their effectiveness, the initiation of either the park tour route or Roulette Farmhouse ATS services would have to be undertaken in conjunction with the provision of an improved and expanded visitor parking facility. Based on the comments of park staff, it would appear that a visitor parking area on the order of two to three times the capacity of the current visitor center parking area would be required in order to accommodate peak visitation demands.
- A longer-term ATS option might be the provision of a public transit linkage between the city of Hagerstown and the park proper. Any such external park service would most likely have to be implemented as part of a larger regional tourism management program. Such a system could build upon the existing relationship of the park with the Washington County “County Commuter” service that is utilized during special events at the park.

■ 2.0 Background Information

2.1 Location

Antietam National Battlefield is located immediately to the north and east of the town of Sharpsburg, in the southeastern portion of Washington County, Maryland (see Figure 1).

Figure 1. Regional Location Map



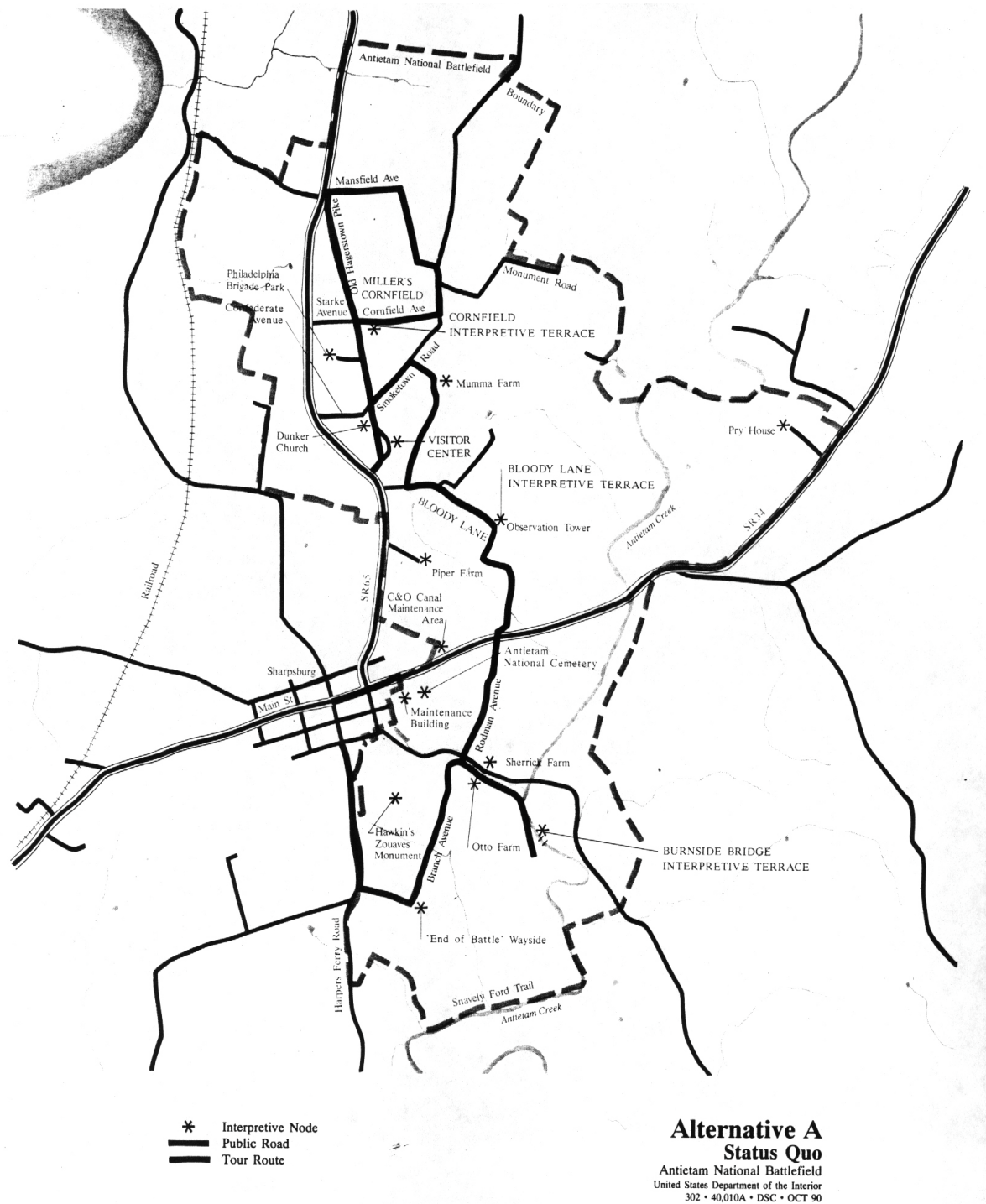
2.2 Administration and Classification

The NPS administers Antietam National Battlefield, and the adjacent Antietam National Cemetery. The park is also responsible for administering the Monocacy Battlefield in Frederick County, Maryland and several other nearby historic sites associated with the Battle of Antietam. These latter sites include interpretive markers at Turner's, Fox's, and Crampton's Gaps on South Mountain (the scene of preliminary fighting), and at the Shepherdstown (West Virginia) Ford where Robert E. Lee's Army of Northern Virginia recrossed the Potomac River from Maryland to Virginia. This NPS unit also closely coordinates with the staff of the nearby Chesapeake and Ohio Canal National Historical Park.

2.3 Physical Description

Antietam National Battlefield consists of approximately 3,255.8 acres of rolling farmland and woodland in southern Washington County, Maryland. The federal government owns approximately 1,545.7 acres, with the remaining acreage being controlled through the NPS scenic easements totaling 1,179.23 acres, 530.8 under private ownership. Antietam is generally considered to represent one of the best preserved of all of the Civil War battlefields. Due to the fact that much of the surrounding area retains the same low-density, agricultural nature that existed at the time of the battle, the landscape has remained relatively unchanged since the fall of 1862 (see Figure 2).

Figure 2. Park Map



Originally established as a national battlefield site by an Act of Congress on August 30, 1890, Antietam was administered by the War Department until August 10, 1933 when responsibility for the battlefield and the adjacent cemetery was transferred to the NPS. This site marks the end of General Robert E. Lee's first invasion of the North in September

1862. This is the site of the bloodiest single day's combat of the entire Civil War. Of the approximately 40,000 Confederate and 87,000 Union troops who participated in this battle, more than 23,100 were dead, wounded or missing at the end of the day. The Antietam National Cemetery contains 5,032 internments, of which 1,836 are unidentified.

In addition to the visitors center, the park consists primarily of a self-guided driving tour that follows the order of battle throughout the day of September 17, 1862. The U.S. Army originally laid out much of this tour route in the 1890s. There are 354 cast iron markers located throughout the park and around its environs that describe the movement and clash of the Union and Confederate armies. The War Department originally installed these markers. A War Department constructed observation tower is located at the Sunken Road. The park also contains approximately 105 monuments on the battlefield commemorating various groups, battle actions, and individuals.

The park Visitor Center is located along Maryland State Route 65 approximately one-half mile north of the Town of Sharpsburg. The visitor center dates from the mid-1960s, and contains a 125-seat auditorium where a short film on the battle is presented, a series of exhibits, and a bookstore. Both inside and outside observation areas allow visitors to obtain an appreciation of the landscape and the overall intimate scale of the battlefield. The NPS owns 33 historic buildings located within the battlefield boundary. These are typically mid-1800s vintage farmhouses and associated structures. The Piper farmhouse has been restored under the NPS historic leasing program and is currently being operated as a commercial bed-and-breakfast.

2.4 Mission and Goals of the National Battlefield

The mission and goals of the Antietam National Battlefield (ANTI) are summarized in the following excerpt from the "Purpose and Need" section of the park's current General Management Plan and Final Environmental Impact Statement.

"The purpose of the plan for Antietam National Battlefield is to provide for future management, use, and interpretation of the area in ways that will best serve visitors while preserving the historic character and appearance of the battlefield. The plan is needed to revise and update actions proposed in the park's 1971 *Draft Master Plan* and to fulfill the mandate set forth in Public Law 86-438 (April 1960) to restore the historic scene for public understanding. The 1960 legislation directed the National Park Service

"...to preserve, protect and improve the Antietam Battlefield comprising approximately 1,800 acres in the state of Maryland and the property of the United States thereon, to assure the public a full and unimpeded view thereof, and to provide for the maintenance of the site (other than those portions thereof that are occupied by public buildings and monuments and the Antietam National Cemetery) in, or its restoration to, substantially the condition in which it was at the time of the battle of Antietam."

2.5 Visitation Levels and Visitor Profile

Following a sustained period of growth throughout the late 1970s and early/mid-1980s, a peak recorded visitation level of approximately 707,000 persons was reached in 1986. Annual visitation has declined in recent years, and, since 1991, has stabilized at a more modest and manageable level of 250,000 to 275,000 per year. This change in visitation levels has been attributed to two primary factors: a change in the visitation counting method (from on-road traffic counts to persons recorded at the park visitor center), and the imposition of a visitor entry fee under the NPS fee demonstration project.

Visitation is heaviest over the period between April and October of each year. Over the past nine years, the average monthly visitation during this time period has ranged from a low of approximately 17,400 persons in April to a high of 57,900 persons in July. With the exception of July, visitation during the months of May through October is relatively constant, ranging between 22,300 persons per month and 29,700 persons per month.

As reported in the park's current GMP (page 38):

“Approximately 10 percent of Antietam visitors are local residents, and an additional 45 percent are regional residents (within a two- to three-hour drive of the park). About 42 percent of visitors come from other parts of the nation. Three percent are international visitors. About 60 percent of visitors are adults between 18 and 60 years old. Thirty-two percent are under age 18, and eight percent are senior citizens.

“The majority of park visitors arrive between May and October (over 50 percent of the total annual visitation). Autumn weekends are popular. Peak daily visitation at these times is about 1,400 people. The remaining visitation is distributed evenly throughout the rest of the year. On the average, visitors remain at the battlefield approximately a half day, generally participating in programs at the visitors center and driving the tour route.

“A variety of special events are held at Antietam, including the Easter Sunrise Service, Memorial Day services, the Fourth of July celebration, the annual Dunker Church commemorative service, the anniversary of the battle, and the Antietam Memorial Illumination. The park also attracts a small number of visitors, primarily canoeists and bird watchers, who are more interested in the natural qualities and open space of the battlefield than in its historic resources.”

Information provided by park staff indicate that the annual Fourth of July celebration and concert attract between 30,000 and 40,000 visitors, with vehicles parking as far as 10 miles away from the park. The NPS, the Maryland State Police, the Maryland State Highway Administration and the local police forces to minimize congestion and delay for these visitors have created a well-developed traffic management plan. The Washington County “County Commuter” transit system operates a park-and-ride shuttle service between the park and the Hagerstown area during this event.

The Antietam Memorial Illumination takes place on the first Saturday in December, and involves the placement of 23,110 candles along the park tour road, one for each of the

Union and Confederate soldiers killed, wounded, or missing during the battle. In recent years, approximately 20,000 persons have toured the battlefield during this single day. In an effort to minimize traffic congestion, the park tour route is reversed. Even with this traffic management action, back-ups of eight to nine miles approaching the park are not uncommon, with vehicles lining up as early as 3:00 p.m. for the 6:00 p.m. entry. The candlelight tour officially continues until 12 midnight, with some vehicles not exiting the park until 2:00 a.m.

The characteristics of the “typical” visitor to Antietam have been changing in recent years. More group tours with an interest in historical studies, more families, and more senior citizens have been observed in recent years. Many visitors are now visiting Antietam as one stop in a multi-stop “Civil War Pilgrimage” type of tour, which often includes Harpers Ferry and Gettysburg as well as Antietam.

Visitation by tour bus groups is particularly noticeable in the spring and fall months. These consist of both school and adult tour groups. During peak visitation periods in the spring and fall, park staff reported that it is not unusual to see 15 to 20 buses in the visitor center parking area or circulating around the park tour road. A large number of tour groups are comprised of representatives of the United States Army. Students at the U.S. Army War College at Carlisle Barracks, Pennsylvania and staff assigned to the Military District of Washington are frequent visitors. These groups, ranging in size from 10 to 300 persons, typically take a guided walking tour along the park tour road.

■ 3.0 Existing Conditions, Issues and Concerns

3.1 Transportation Conditions, Issues and Concerns

Based upon conversations with park staff and limited field observations, one of the most significant transportation problems facing the park is the inadequacy of the exiting visitor center parking area to accommodate peak demands. The existing visitor center parking area can only accommodate 61 private automobiles (including disabled users) and three buses or large recreational vehicles. The three bus and RV spaces are poorly marked and signed, with regular vehicles commonly using these spaces when the other auto parking spaces are full.

Two nearby grass areas (referred to by park staff as “The Pit” and “The Doughnut” are able to accommodate approximately 165 additional vehicles. The park’s “formal” parking areas are filled to capacity during all special events, on many weekend days, and on many weekdays during peak visitation months. Park staff have identified a 10-acre site near the existing visitor center and Dunker Church as the potential location for a new visitor center and expanded visitor-parking area. However, the absence of a formal transportation study for the park was cited as a factor limiting the options for the resolution of these and related issues.

Several of the smaller parking areas located at interpretive sites along the battlefield tour route are also deemed by park staff to be inadequate to accommodate peak demands. The

parking areas along Cornfield Avenue and at the Burnside Bridge were noted as being particularly deficient in this regard. The current GMP proposes to remove Cornfield Avenue as a traffic route and rebuild this area as an 1860s vintage farm road with off-site parking provided.

The GMP also proposes to create a history center at the Mumma Farmstead, which would allow for a relocation of buses to this location from sites such as the Cornfield. At the Sunken Road (Bloody Lane) site, there are only 20 auto spaces and one bus/RV space. This is typically a location of a longer duration stop by visitors; particularly those who choose to climb the 1898 War Department constructed observation tower to obtain an overview of the entire battlefield. At Burnside Bridge, visitors typically remain for 1.0 to 1.5 hours. There is a substantial amount of recreational activity at this site (fishing, hiking, picnicking, etc.) in addition to walking about the battle site. Parking is provided for 15 autos, two handicapped vehicles, and two buses or large RVs. Park staff reported that during peak visitation periods, this parking area is almost always full. Along the north side of Maryland Route 34 across from the Antietam National Cemetery, a gravel parking area provides space for approximately 20 autos and two tour buses or large RVs.

An interesting transportation problem facing this park is the presence of park ranger led “auto caravans.” During heavy visitation periods, groups of 40 to 100 persons will form an informal caravan led by a park ranger to tour the battlefield following the introductory movie. Although this service could be provided every hour due to demand, the need for a period of approximately three hours to adequately tour the battlefield limits this operation to three ranger led tours each day. Tours are provided beginning at 10:00 a.m., 1:00 p.m., and 3:00 p.m. A typical “caravan” will consist of 45 to 50 cars, with some being as large as 100 vehicles containing 250 to 300 visitors.

Park staff commented that these large groups of vehicles, moving as a unit along the tour route, not only overwhelm the attraction parking areas, but result in vehicles parking on the grass shoulders and on the pavement edge of the narrow (1.5-lane wide) tour route. This contributes to damage to the park’s resources. In addition, this large number of vehicles results in congestion for other visitors desiring to take the tour route on their own.

The tour road itself was noted as a transportation issue. Originally laid out by the U.S. Army in the 1890s, it was designed for travel by horse-and-buggy, and, with few exceptions, follows the same horizontal and vertical alignment today as the original route constructed in the 1890s. In many areas the tour road is only 1.5-lanes wide, and with a number of very tight and restrictive curves, vehicular circulation along this route is very difficult, particularly for buses and large RVs. In addition, several sections of the tour route (such as Cornfield Avenue and Smoketown Road) are public routes owned and maintained by Washington County, Maryland, and provide access routes to privately owned farms and other residences adjacent to the battlefield.

At the present time, there are no regularly scheduled public transit services to and from the park, with the exception of privately operated tour buses. The local public transportation agency, the Washington County “County Commuter” transit system comes no closer to the park than the interchange of I-70 and Maryland Route 65 approximately eight miles north of the park entrance. At one time, the “County Commuter” operated

fixed-route service to the Town of Sharpsburg. However, this route was discontinued several years ago due to very low ridership.

An emerging transportation issue concerns the ability of the park to accommodate the transportation and parking of disabled persons. This is a particularly noticeable issue on heavy visitation days. Part of this problem relates to the age of the park visitors center and associated parking area, which both date from the mid-1960s.

An evolving transportation issue noted by park staff was the need to consider how best to link Antietam with other Civil War battlefields in the region. The concept of regional tourism and the potential creation of a “Civil War Trails” routing that would integrate such related sites as Harpers Ferry, Antietam, South Mountain, and Gettysburg is currently being discussed.

3.2 Community Development Conditions, Issues and Concerns

The park has forged very strong and supportive relationships with adjacent landowners, the town of Sharpsburg, Washington County, and the state of Maryland in recent years. In discussions with park staff and representatives of the Town of Sharpsburg, the concept of actively discouraging commercial and residential development in the area was noted as a well-established planning principle. The Town of Sharpsburg has no desire to either expand in size, or to allow any new commercial development to take place within its boundaries beyond that which already exists. As a result, the “gateway community” is effectively the city of Hagerstown, approximately eight miles to the north of the park.

The park and the surrounding communities have been very effective in creating a program of scenic easements to preserve the landscape surrounding the battlefield in a state similar to that that existed at the time of the battle in September 1862. These efforts, with strong support from both the Washington County and state of Maryland governments, appear to be well received by the effected parties. Associated programs include the state of Maryland’s “State Rural Legacy Program.”

3.3 Natural or Cultural Resource Conditions, Issues and Concerns

The park’s currently adopted GMP calls for the restoration of some internal park roadways to a condition similar to that that existed at the time of the battle. While this has generated some concern by local residents whose access to their properties would be modified, this long-term plan appears to be generally accepted.

The large number of private vehicles and tour buses traversing the park’s internal tour route and the associated damage to the road surface, its edges, and wayside parking areas is viewed as a major concern by park staff. The narrow roadway surface and frequent sharp turns along this route have resulted to some damage to historic fences and monuments located adjacent to the roadway.

The current visitors center and parking area is located in the area on which the initial stages of the battle were fought. The current GMP recommends the relocation of the visitors center and parking area to a site removed from this location and the restoration of the terrain and landscape to a close approximation of its original condition.

3.4 Recreation Conditions, Issues and Concerns

A fairly wide range of recreational opportunities is available within and adjacent to the park. These include: bicycling, camping (restricted to organized groups such as Boy Scouts, Church, and School Groups at the Rohrback Group Campground), horseback riding, fishing, picnicking, and boating or tubing on the Antietam Creek. The NPS regulates the conduct of all of these activities. Park staff did not comment on any problems associated with these activities at the time of the on-site visit.

■ 4.0 Planning and Coordination

4.1 Unit Plans

The current park GMP was approved in April 1992. There are no immediate plans for a revision to this basic park-planning document. Other recent planning efforts that are being employed by the park include the Antietam National Battlefield 1998-2002 Strategic Plan for the Government Performance and Results Act of 1993 (November 15, 1998) and the Antietam National Battlefield Analysis of the Visible Landscape (September 1988).

4.2 Public and Agency Coordination

The park appears to have a very positive and supportive working relationship with all of the surrounding communities and the state of Maryland. In particular, the collaborative efforts of the NPS with the town of Sharpsburg to limit expanded commercial activity, and the efforts of the Washington County (Maryland) government to help preserve the visual landscape around the park boundaries are particularly noteworthy.

■ 5.0 Assessment of Need

5.1 Magnitude of Need

It appears that ATS may have a significant potential to address the currently observed transportation and resource conservation issues facing the Antietam National Battlefield. These potentials appear to relate primarily to the provision of improved internal park

circulation for visitors. Based on existing information and observations, it would appear that this park is a high-priority candidate for a more detailed transportation study to more precisely define the specific elements of such a program.

5.2 Feasible Alternatives

There appear to be several feasible ATS alternatives that could be potentially implemented at Antietam National Battlefield. These include the following:

- An internal circulation tram or bus service following the existing park tour route. This service might take the form of either a voluntary or mandatory visitor circulation system. The implementation of such a service could not only improve the visitor experience by providing the opportunity for on-board interpretation, but would alleviate, if not totally eliminate, the impacts on the park's resources now being imposed by auto and bus use. Such an internal circulation service would also facilitate visitation by elderly and disabled visitors. The vehicles used for any such service would have to be of an appropriate scale to minimize damage to the tour road and surrounding facilities such as fences and monuments. This service could also help to reduce parking demands at the designated stops along the tour road.
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■ 6.0 Bibliography

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■ 7.0 Persons Interviewed

Robert Arch, Director, Washington County Planning Commission

Kevin Cerrone, Director, Washington County Transportation Department, “County Commuter” Transit System

Ben Hart, Executive Director, Washington County Convention and Visitors Bureau

John W. Howard, Superintendent (and other Park staff), Antietam National Battlefield

George Kessler, Mayor, town of Sharpsburg, Maryland